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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,354	02/06/2002	Joseph A. Kozlowski	AL01381K	4273

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SCHERING-PLOUGH CORPORATION
PATENT DEPARTMENT (K-6-1, 1990)
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EXAMINER

COPPINS, JANET L

ART UNIT PAPER NUMBER

1625

DATE MAILED: 08/05/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,354

Applicant(s)

KOZLOWSKI ET AL.

Examiner

Janet Coppins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ONE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-57 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are sulfur containing (excluding aminosulfonyls) and R⁴ is phenyl, benzyl, or cyclohexyl, classified in class 568, subclass 34.
 - II. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are sulfur containing (excluding aminosulfonyls) and R⁴ is pyridyl, classified in class 546, subclass 294.
 - III. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are sulfur containing (excluding aminosulfonyls) and R⁴ is pyrimidyl, classified in class 544, subclass 239.
 - IV. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are sulfur containing (excluding aminosulfonyls) and R⁴ is furan, classified in class 544, subclass 475.
 - V. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are sulfur containing (excluding aminosulfonyls) and R⁴ is thiophene, classified in class 544, subclass 62.
 - VI. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are sulfur containing (excluding aminosulfonyls) and R⁴ is

selected from the remaining H, alkyl, aryl, etc. substituents not mentioned in the above groups I-V, classified in class 568, subclass 30.

- VII. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are Non-sulfur containing (excluding aminosulfonyls) and R^4 is phenyl, benzyl, or cyclohexyl, classified in various subclasses of class 564.
- VIII. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are Non-sulfur containing (excluding aminosulfonyls) and R^4 is pyridyl, classified in class 546, subclass 304.
- IX. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are Non-sulfur containing (excluding aminosulfonyls) and R^4 is pyrimidyl, classified in class 544, subclass 238.
- X. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are Non-sulfur containing (excluding aminosulfonyls) and R^4 is furan, classified in class 544, subclass 480.
- XI. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are Non-sulfur containing (excluding aminosulfonyls) and R^4 is thiophene, classified in class 544, subclass 68.
- XII. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are Non-sulfur containing (excluding aminosulfonyls) and R^4 is selected from the remaining H, alkyl, aryl, etc. substituents not mentioned in the above groups, classified in various subclasses of class 564.

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- XIII. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are sulfur containing (excluding aminosulfonyls), R^4 is phenyl, benzyl, or cyclohexyl, and Y, R^1 , Z, R^2 and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XIV. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are sulfur containing (excluding aminosulfonyls), R^4 is pyridyl, and Y, R^1 , Z, R^2 and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XV. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are sulfur containing (excluding aminosulfonyls), R^4 is pyrimidyl, and Y, R^1 , Z, R^2 and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XVI. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are sulfur containing (excluding aminosulfonyls), R^4 is furan, and Y, R^1 , Z, R^2 , and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XVII. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are sulfur containing (excluding aminosulfonyls), R^4 is thiophene, and Y, R^1 , Z, R^2 and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XVIII. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L^1 and L^2 are sulfur containing (excluding aminosulfonyls), R^4 is selected

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from the remaining H, alkyl, aryl, etc. substituents not mentioned in the above groups, and Y, R¹, Z, R² and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.

- XIX. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are Non-sulfur containing (excluding aminosulfonyls), R⁴ is phenyl, benzyl, or cyclohexyl, and Y, R¹, Z, R² and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XX. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are Non-sulfur containing (excluding aminosulfonyls), R⁴ is pyridyl, and Y, R¹, Z, R² and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XXI. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are Non-sulfur containing (excluding aminosulfonyls), R⁴ is pyrimidyl, and Y, R¹, Z, R² and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XXII. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are Non-sulfur containing (excluding aminosulfonyls), R⁴ is furan, and Y, R¹, Z, R² and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.
- XXIII. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are Non-sulfur containing (excluding aminosulfonyls), R⁴ is

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thiophene, and Y, R¹, Z, R² and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.

XXIV. Claims 1-57, in part, drawn to compounds according to the formula of claim 1, wherein L¹ and L² are Non-sulfur containing (excluding aminosulfonyls), R⁴ is selected from the remaining H, alkyl, aryl, etc. substituents not mentioned in the above groups, and Y, R¹, Z, R² and the nitrogen atom form a heterocycloalkyl, classified in various subclasses of classes 546 and 548.

2. Inventions I-XXIV are related as variant compounds of the general formula of claim 1. These inventions are distinct from one another because they have achieved a separate status in the art, and have fields of search which are not coextensive, and are capable of supporting separate patents.

In addition there is a lack of common nucleus in that the L¹ and L² groups represent various alkyl, heteroalkyl, or covalent bond moieties, and R⁴ represents various alkyl, aryl, heteroalkyl, aliphatic, cyclic, or heterocyclic substituents. The problem is exacerbated because the Y, R¹, Z, and R² substituents can be taken with the adjacent nitrogen atom to form a heterocycloalkyl. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. Claims 1-57 generic to a plurality of disclosed patentably distinct species. If possible, Applicant is requested under 35 U.S.C. 121 to provisionally elect a single disclosed species, according to the aforementioned groups.

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Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

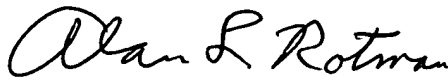
4. Applicant is reminded that upon the cancellation of claims, in part, to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet Coppins whose telephone number is 703.308.4422. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on 703.308.4698. The fax phone numbers for the organization where this application or proceeding is assigned are 703.746.9037 for regular communications and 703.872.9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1235.

Janet L. Coppins
July 31, 2002


ALAN L. ROTMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600